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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,868	08/13/2001	Bruno Heim	HEIM	7886
20151	7590	12/24/2003	EXAMINER	
HENRY M FEIEREISEN, LLC 350 FIFTH AVENUE SUITE 4714 NEW YORK, NY 10118			NGUYEN, HANH N	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,868	Applicant(s) HEIM, BRUNO	
	Examiner Nguyen N Hanh	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendments filed on 10/21/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1,5,6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lykes in view of Adams.

Regarding claim 1, Lykes shows a stator for an electric drive; comprising: a stator housing (6 in Fig. 1) in the form of a stack of laminations, said housing having opposite winding end portions and a stator bore which is defined by an axis; a pair of tubular frame (11 and 12), one tubular frame abutting an axis-confronting inner surface of one winding end portion and the other tubular abutting an axis-confronting inner surface of the other winding end portion (Fig. 1 and 2); wherein one tubular frame in concert with an end face of the housing (10) bounds a cavity for receiving one winding end portion, and wherein the other tubular frame in concert with another end face of the housing bounds a cavity for receiving the other winding end portion, with each of the cavities being filled out with insulating casting material (Col. 5, lines 22-27). Lykes fails to show a cooling jacket arranged in circumferential direction of the stator housing and the tubular frame is made of insulation material.

However, Adams discloses an electric machine wherein the cooling jacket is arranged in circumferential direction of the stator housing (Fig. 1) for the purpose of removing heat from the motor.

Since Lykes and Adams are in the same field of endeavor, the purpose disclosed by Adams would have been recognized in the pertinent art of Lykes.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Lykes by arranging a cooling jacket in a circumferential direction of the stator housing as taught by Adams for the purpose of removing heat from the motor.

Moreover, it would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Lykes by using insulation material to form the tubular frame for the purpose of electrical insulating, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 6, it is noted that all limitations of the claimed invention has been fulfilled by Lykes and Adams as in claim 1.

Regarding claim 5 and 10, Lykes also shows a stator for an electric drive wherein each tubular insulator has a housing-distal end (the surfaces facing the coil end) provided with a reinforcement for providing a measure for a required filling height of the casting material during potting of the winding end portions.

2. Claims 2-4,7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lykes in view of Adams and further in view of Luenberger.

Regarding claim 2, Lykes and Adams disclose a stator wherein each tubular insulator includes a centering ring (annular flange¹⁹ as shown in Fig. 2 and Col. 3, lines 37-38) for radially centering the tubular insulator in relation to the stator bore of the housing. Lykes and Adams fail to show housing-confronting end face which confront the end face of the stator.

However, Luenberger discloses a tubular sleeve includes a housing-confronting end face which confronts the end face of the stator for the purpose of fixing the tubular sleeve to the stator.

Since Lykes, Adams and Luenberger are in the same field of endeavor, the purpose disclosed by Luenberger would have been recognized in the pertinent art of Lykes and Adams.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Lykes and Adams by making projection 19 confronting the end face of the stator as taught by Adams for the purpose of fixing the tubular sleeve to the stator.

Regarding claim 7, it is noted that all limitations of the claimed invention has been fulfilled by Lykes, Adams and Luenberger as in claim 2.

Regarding claim 3 and 8, Lykes also shows a the centering ring (annual flange 19) is formed integrally with the tubular insulator.

Regarding claims 4 and 9, the structure disclosed by Lykes, modified by Adams and Luenberger discloses the invention except for showing a pair of circular cover slides which projects beyond the end faces of the stator housing. It is noted that the circular cover slide (20 in Fig. 1) which projects beyond the end faces of the stator housing is integrally formed as one piece. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form a pair of circular cover slides which projects beyond the end faces of the stator housing, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Response to Arguments

3. Applicant's arguments filed on 10/21/2003 have been fully considered but they are not persuasive. The applicant's argument is on the ground that "the structure disclosed by Lykes shows three elements to form a cavity while cavity of the stator of the present invention is bounded by two elements only and it is not obvious to combine Adams to Lykes". The Examiner respectfully disagrees with the Applicant. Claims 1 and 6 are open ended claims. They do not exclude a possible third or fourth elements to form a cavity. The feature that the Applicant relies on "the cavity of the stator according to the present invention is bounded by two elements (tubular insulator and cooling jacket) **only**" is not recited in the rejected claim. It is noted that the cooling jacket of the present invention has the same function the motor housing 10 of Lykes: to provide a motor housing around the stator. The only difference is the motor housing 10 of Lykes doesn't have cooling fins to form a cooling jacket as recited in claims 1 and 6.

However, it would be obvious for an ordinary skill in the art to embed the cooling pipes of Adams to the housing 10 of Lykes to form a cooling jacket for the purpose of releasing heat.

In short, the claims are given the broadest reasonable interpretation. Therefore, the rejection is still deemed proper.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information on How to Contact USPTO

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703)305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703)308-1371. The fax phone numbers

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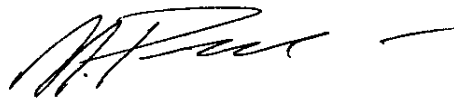
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for the organization where this application or proceeding is assigned are (703)305-3431 for regular communications and (703)305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

HNN

December 18, 2003

A handwritten signature in black ink, appearing to read 'N. Ponomarenko', followed by a horizontal line.

Nicholas Ponomarenko
Primary Examiner
Technology Center 2800